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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/113,770	07/10/1998	EDWARD G. TIEDEMANN JR.	QCPA577	8420

23696 7590 07/08/2002

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

LIU, SHUWANG

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 07/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

TK

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Office Action Summary	Application No. 09/113,770	Applicant(s) TIEDEMANN, EDWARD G.	
	Examiner Shuwang Liu	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,5,8,9 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,5,8,9 and 12-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. The restriction requirement is withdrawn in response to the arguments received on April 29, 2002.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 2, 5, 8, 9 and 12-14 are rejected under 35 U.S.C. 102(e) as being by Ramel (US 5,864,577).

As shown in figure 5, Ramel discloses an apparatus and a method for transmitting spread spectrum data, comprising:

- (1) regarding claim 2:

a modulation means (4) for receiving data and for modulating the received data in accordance with a spread spectrum modulation format (column 6, lines 3-column 7, line 2); and

an upconversion means (9) for receiving the modulated data and for upconverting the modulated data for transmission at a frequency determined in accordance with a selection signal (output from 7), wherein the selection signal is determined in accordance with a subset of bits from the received data (F) (column 6, line 3-column 7, line 2).

(2) regarding claim 5:

a modulation means (4) for receiving data and for modulating the received data in accordance with a code channel selection signal (C) (column 6, lines 3-61); and

an upconversion means (9) for receiving the modulated data and for upconverting the modulated data for transmission at a frequency determined in accordance with a selection signal, wherein the code channel-selection signal is determined in accordance with a subset of bits of the received data (F) (column 6, line 3-column 7, line 2).

(3) regarding claim 8:

a spread spectrum modulator (4) (column 6, lines 3-61); and

at least one upconverter (9) having an output, coupled to the spread spectrum modulator (4), the output of the upconverter having a carrier frequency that changes in accordance with a predetermined pattern, wherein the predetermined pattern is determined by a subset of bits from the spread

spectrum data (column 6, line 3-column 7, line 9).

(4) regarding claim 9:

a spread spectrum modulator (4) (column 6, lines 3-61); and

at least one upconverter (9) having an output, coupled to the spread spectrum modulator, the output of the upconverter having a carrier frequency changing in accordance with a predetermined pattern, wherein the spread spectrum modulator modulates the spread spectrum data in accordance with a code channel selection signal that is determined in accordance with a subset of bits of the received data (column 6, line 3-column 7, line 9).

(5) regarding claim 12:

a modulation means (4) for receiving data and for modulating the received data in accordance with a code channel selection signal that is determined in accordance with a subset of bits of the received data (column 6, lines 3-61); and

an upconversion mean (9) for receiving the modulated data and for upconverting the modulated data for transmission at a frequency determined in accordance with a selection signal that is determined in accordance with a subset of bits from the received data (column 6, line 3-column 7, line 9).

(6) regarding claim 13:

modulating the data (4) (column 6, lines 3-61);

selecting a carrier frequency (8) in accordance with a subset of bits from the data (column 6, line 3-column 7, line 9); and

upconverting (9) the data using the selected carrier frequency.

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(7) regarding claim 14:

modulating the data (4) in accordance with a code channel selection signal that is determined in accordance with a subset of bits of the data (column 6, lines 3-61); and upconverting (9) the modulated data using a selected carrier frequency (column 6, line 3-column 7, line 9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramel in view of Langberg et al. (US 5,852,630).

As shown in figure 5, Ramel discloses a method for transmitting data, the method comprising:

(1) regarding claim 15:

modulating (4) the data (column 6, lines 3-61);
selecting a carrier frequency (8) in accordance with a subset of bits from the data (column 6, line 3-column 7, line 9); and
upconverting (9) the data using the selected carrier frequency (column 6, line 3-column 7, line 9).

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(2) regarding claim 16:

modulating (4) the data in accordance with a code channel selection signal that is determined in accordance with a subset of bits of the data (column 6, lines 3-61); and upconverting (9) the modulated data using a selected carrier frequency (column 6, line 3-column 7, line 9).

Ramel discloses all of the subject matter as described above except for the method written by a software program embodied in a computer-readable medium.

However, Langberg et al. teaches that the method and apparatus for a transceiver warm start activation procedure with precoding can be implemented in software stored in a computer-readable medium. The computer-readable medium is an electronic, magnetic, optical, or other physical device or means that can be contain or store a computer program for use by or in connection with a computer-related system or method (column 3, lines 51-65). One skilled in the art would have clearly recognized that the method of Ramel would have been implemented in a software. The implemented software would perform same function of the hardware for less expense, adaptability, and flexibility. Therefore, it would have been obvious to write the software for the method of Ramel embodied in a computer-readable medium as taught by Langberg et al. in order to reduce cost and improve the adaptability and flexibility of the communication system.

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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuwang Liu whose telephone number is (703) 308-9556.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin, can be reached at (703) 305-4714.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

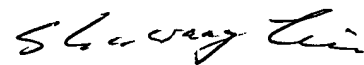
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Shuwang Liu
July 2, 2002